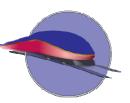
Individual PE/NEPA Activities Application Form

High-Speed Intercity Passenger Rail (HSIPR) Program



Applicants interested in applying for funding of Preliminary Engineering (PE)/National Environmental Protection Act (NEPA) activities under the FY10 Individual Project solicitation are required to submit this application form and other required documents as outlined in Section H of this application. List and describe any supporting documentation submitted in Section G. Applicants should reference the FY10 Individual Projects Notice of Funding Availability (NOFA) for more specific information about application requirements. If you have questions about the HSIPR Program or this application, please contact the Federal Railroad Administration (FRA) at HSIPR@dot.gov.

Applicants must use this form by entering the required information in the gray narrative fields, check boxes, or drop-down menus. Submit this completed form, along with any supporting documentation, electronically by uploading them to GrantSolutions.gov by 5:00 p.m. EDT on August 6, 2010.

A. Point of Contact and Applicant Information

Applicant should ensure that the information provided in this section matches the information provided on the SF-424 forms.

(1) Name the submitting agency: Virginia Department of Rail and Public Transportation		Provide the submitting agency Authorized Representative name and title.: Kevin B. Page - Chief of Rail Transportation		
Street Address: 600 East Main St., Suite 2102	City: Richmond	State: VA	Zip Code: 23219	Authorized Representative telephone: 804.786.3963 Authorized Representative email: kevin.page@drpt.virginia.gov
Provide the submitting agency Point of Contact (POC) name and title (if different from Authorized Representative):		Submitting agency POC telephone: Submitting agency POC email:		



B. Eligibility Information

Complete the following section to demonstrate satisfaction of applicant eligibility requirements.

 (1) Select the appropriate box from the list below to identify applicant type. Applicant type is defined in Section 3.1 of the NOFA.
☐ Group of States
☐ Amtrak
Amtrak in cooperation with one or more States
If selecting one of the types below, additional documentation is required. Please select the appropriate box to establish applicant eligibility as described in Section 3.2 of the NOFA and list the supporting document in Section G.2 of this application.
☐ Interstate Compact
☐ Public Agency established by one or more States
(2) Indicate the planning processes used to identify the underlying project.¹ As defined in Section 3.5.1 of the NOFA, the process should analyze the investment needs and service objectives of the service that the underlying project is intended to benefit. The appropriate planning document must be listed in Section G.2 of this application. ⊠ State Rail Plan
Service Development Plan (SDP)
Service Improvement Plan (SIP)
☐ Statewide Transportation Improvement Plan (STIP)
Other, please list this document in Section G.2 with "Other Appropriate Planning Document" as the title
☐ The underlying project is not included in a relevant and documented planning process

PE/NEPA activities include the specific tasks necessary to complete PE/NEPA documentation and other tasks applied for in this application that relate to this phase of the underlying project's development. The underlying project is the larger area and/or infrastructure that will be become the Final Design (FD)/Construction project following completion of the PE/NEPA activities.



C. PE/NEPA Activities Summary

Identify the title, location, and other information of your proposed PE/NEPA work by completing this section.

(1) **Provide a clear, concise, and descriptive project name.** Use identifiers such as state abbreviations, major cities, infrastructure, and tasks of the underlying project (e.g., "DC-Capital City to Dry Lake Track Improvements").

VA-MAS 90 Tier II EIS and PE for the Richmond Area to Washington D.C. project segment of the SEHSR

(2) Indicate the anticipated funding level for the PE/NEPA activities below. This information must match the SF-424 forms, and dollar figures must be rounded to the nearest whole dollar. When the non-Federal match percentage is calculated, it must meet or exceed 20 percent of the total project cost.

Federal Funding Request	Non-Federal Match Amount	Total PE/NEPA Activities Cost	Non-Federal Match Percentage of Total Activities Cost
\$ 44,308,000	\$ 11,077,000	\$ 55,385,000	20 %
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(3) Indicate the activity(ies) for which you are applying. Check all that apply.

□ Preliminary Engineering □ Project NEPA²

(4) Indicate the anticipated duration, in months, for these PE/NEPA activities (e.g., 36).

Number of Months: 96

(5) List the name of the corridor where the underlying project is located.

Richmond Area to Washington D.C. MAS 90 project of the SEHSR (Washington D.C. to Charolotte NC) Corridor.

(6) Describe the underlying project location, using municipal names, mileposts, control points, or other identifiable features such as longitude and latitude coordinates. If available, please provide a project GIS .shp file as supporting documentation. This document must be listed in Section G.2 of this application.

Richmond Area to Washington D.C. MAS 90 project from Beulah on the Peninsula Line Richmond (mile post CA-76) through Rivanna Junction and Richmond's historic Main Street Station to Control Point "RO" located in Arlington County, VA (mile post CFP-110).

(7) **Provide a project abstract outlining the proposed PE/NEPA activities.** Summarize the project narratives provided in the Statement of Work in 4-6 sentences. Capture the major milestones and outcomes of PE/NEPA activities and the anticipated benefits that will result from the completion of the underlying project.

The Virginia SEHSR I-95 segment was part of the SEHSR Tier I and ROD from July, 2002. The next logical step is a Richmond Area to Washington D.C. project segment MAS 90 Tier II EIS which will complete the SEHSR Corridor NEPA process when coupled with the pending Tier II EIS for SEHSR prepared by North Carolina and Virginia from Richmond Main Street Station south to Raleigh NC. The PE for Fredericksburg to Arlington will complete the PE design from Richmond to Arlington for MAS 90 (spirals with incremental construction MAS 79) when coupled with the PE design for the Richmond Area Improvements.

² Project NEPA documentation is required for the specific design alternative identified through Preliminary Engineering and related activities. Project NEPA documentation may also be referred to as site-specific NEPA or Tier II NEPA documentation.



(8) Indicate the source, amount, and percentage of matching funds for the PE/NEPA activities. The sum of the figures below should equal the amount provided in Section C.2. Click on the prepopulated fields to select the appropriate responses from the lists provided in type of source, status of funding, and type of funds. Dollar figures must be rounded to the nearest whole dollar. Identify supporting documentation that will allow FRA to verify the funding source, and list it in Section G.2 of this application.

Non-Federal Funding Sources	New or Existing Source?	Status of Funding ³	Type of Funds	Dollar Amount	% of Total Project Cost	Describe Any Supporting Documentation to Help FRA Verify Funding Source
DRPT	Existing	Committed	Cash	\$ 8,101,000	15 %	See Financial Plan
CSX	Existing	Committed	Cash	\$ 2,976,000	5 %	July 26, 2010 CSX Letter
	New	Committed	Cash	\$	%	
	New	Committed	Cash	\$	%	
	New	Committed	Cash	\$	%	
	New	Committed	Cash	\$	%	
	New	Committed	Cash	\$	%	
	New	Committed	Cash	\$	%	
	New	Committed	Cash	\$	%	
	New	Committed	Cash	\$	%	
St	ım of Non-F	Federal Fundi	ing Sources	\$ 11,077,000	20 %	N/A

Planned: This category is for funds that are identified and have a reasonable chance of being committed, but are neither committed, nor budgeted (e.g., proposed sources that require a scheduled referendum, requests for state/local capital grants, and proposed debt financing that has not yet been adopted in the agency's capital investment program).



 $^{^3}$ Reference Notes: The following categories and definitions are applied to funding sources:

Committed: Committed sources are programmed capital funds that have all the necessary approvals (e.g., statutory authority) to be used to fund the proposed project without any additional action. These capital funds have been formally programmed in the State Rail Plan and/or any related local, regional, or state capital investment program or appropriation guidance. Examples include dedicated or approved tax revenues, state capital grants that have been approved by all required legislative bodies, cash reserves that have been dedicated to the proposed project, and additional debt capacity that requires no further approvals and has been dedicated by the sponsoring agency to the proposed project.

Budgeted: This category is for funds that have been budgeted and/or programmed for use on the proposed project but remain uncommitted (i.e., the funds have not yet received statutory approval). Examples include debt financing in an agency-adopted capital investment program that has yet to be committed in the near future. Funds will be classified as budgeted when available funding cannot be committed until the grant is executed or due to the local practices outside of the project sponsors control (e.g., the project development schedule extends beyond the State Rail Program period).

D. Underlying Project Overview

Answer the following questions about the underlying construction project that is the subject of the PE/NEPA application.

(1) Indicate the expected service outcomes of the underlying project.⁴ Check all that apply. ☐ Additional service frequencies ☐ Improved operational reliability on existing route ☐ Improved on-time performance on existing route ☐ Increased average speeds/shorter trip times ☐ Other (please describe) Briefly clarify your response(s), if needed:						
(2) Quantify the applicable service outcomes of the underlying project. Provide the current conditions and anticipated service outcomes. Future state information is necessary only for relevant service benefits.						
	Frequencies ⁵	Scheduled Trip Time (in minutes)	Average Speed (mph)	Top Speed (mph)	Reliability – Provide Either On-Time Performance Percentage or Delay Minutes	
Current	30	135	45	69	82	
Future	64	124	49	90	85	
(3) Indicate the type of expected capital investments included in the underlying project. Check all that apply. □ Structures (bridges, tunnels, etc.) □ Rolling stock acquisition □ Track rehabilitation and construction □ Support facilities (yards, shops, administrative buildings) □ Major interlockings □ Grade crossing improvements □ Station(s) □ Electric traction □ Communication, signaling, and control □ Other (please describe) □ Rolling stock refurbishments						
□ Rolling stock refurbishments (4) Select and describe the operational independence of the underlying project. □ This project is operationally independent. □ This project is not operationally independent. Briefly clarify your response: This project can provide incremental improvements on its own including running time reduction and reliablity improvements of the existing passenger rail service in the corridor. Increased frequencies require other projects to be completed on other segments of the corridor such as the Raleigh to Richmond and Raleigh to Charlotte project segments of the SEHSR Corridor.						

⁶ A project is considered to have operational independence if, upon being implemented, it will provide tangible and measurable benefits, even if no additional investments in the same service



⁴ The underlying project is the larger area and/or infrastructure that will be become the FD/Construction project following completion of the PE/NEPA activities.

⁵ Frequency is measured in daily one-way train operations. One daily round-trip operation should be counted as two daily one-way train operations.

(5) **Provide Right-of-Way ownership in the underlying project area.** Where railroads currently share ownership, identify the primary owner. If Amtrak is the Type of Railroad, the Right-of-Way Owner field does not need to be completed. Click on the prepopulated fields to select the appropriate response from the lists of railroad types and status of agreements. If more than five owners, please provide the same information in a separate supporting document, and list it in Section G.2 of this application.

Type of Railroad	Right-of-Way Owner	Route- Miles	Track- Miles	Status of Agreements to Implement
Class 1 Freight	CSX	110	260	Master Agreement in Place
Amtrak				Master Agreement in Place
Amtrak				Master Agreement in Place
Amtrak				Master Agreement in Place
Amtrak				Master Agreement in Place

(6) Name the Intercity Passenger Rail Operator and provide the status of the agreement. If applicable, provide the status of the agreement with the partner that will operate the planned passenger rail service (e.g., Amtrak). Click on the prepopulated field to select the appropriate response from the status of agreement list.

Name of Rail Service Operator	Status of Agreement
Amtrak	Final executed agreement on project scope/outcomes

(7) Identify the types of services affected by the underlying project and provide information about the existing rail services within the underlying project boundaries (e.g., freight, commuter, and intercity passenger). Click on the prepopulated fields to select the appropriate response from the list of types of service.

Type of		Top Ex Speeds \ Under Proj Bound	Within lying ect	Number of Route-Miles Within Underlying Project	Average Number of Daily One-Way Train Operations ⁷ Within Underlying	
Service	Name of Operator	Passenger	Freight	Boundaries	Project Boundaries	Notes
Intercity Pa	Amtrak	69	60	110	26	Existing Levels
Freight	CSX	69	60	110	41	Existing Levels
Commuter	VRE	60	60	55	28	Existing Levels
Freight						
Freight						
Freight						



One daily round-trip operation should be counted as two daily one-way train operations.

(8) Estimate the share of benefits that will be realized by nonintercity passenger rail service (e.g., commuter, freight) and select the approximate cost share to be paid by the beneficiary. Click on the prepopulated fields to select the appropriate response from the lists of type of beneficiary, anticipated share of benefits, and approximate cost share. If more than three types of nonintercity passenger rail are beneficiaries, please provide additional information in a separate supporting document, and list in Section G.2 of this application.

Type of Nonintercity Passenger Rail	Expected Share of Benefits	Approximate Cost Share
Freight	Less than 50%	0-25%
Commuter	Less than 50%	0-25%
Freight	Less than 50%	0-25%

⁸ Benefits include service improvements such as increased speed, on-time performance, improved reliability, and other service quality improvements.

E. Additional Response to Evaluation Criteria

Provide a separate response to each of the following categories of potential benefits to identify the ways in which the proposed PE/NEPA activities and underlying project will achieve these benefits.⁹

(1a) Transportation Benefits

Describe the ways in which the proposed PE/NEPA activities or underlying corridor program will address the potential of successfully executing these transportation benefits in a cost-effective manner:

- Supporting the development of intercity high-speed rail service;
- Generating improvements to existing high-speed and intercity passenger rail service, as reflected by estimated increases in ridership (as measured in passenger-miles), increases in operational reliability (as measured in reductions in delays), reductions in trip times, additional service frequencies to meet anticipated or existing demand, and other related factors;
- Generating cross-modal benefits, including anticipated favorable impacts on air or highway traffic congestion, capacity, or safety, and cost avoidance or deferral of planned investments in aviation and highway systems;
- Creating an integrated high-speed and intercity passenger rail network, including integration with existing intercity passenger rail services, allowance for and support of future network expansion, and promotion of technical interoperability and standardization (including standardizing operations, equipment, and signaling);
- Encouragement of intermodal connectivity and integration through provision of direct, efficient transfers among intercity transportation and local transit networks at train stations, including connections at airports, bus terminals, subway stations, ferry ports, and other modes of transportation;
- Enhancing intercity travel options;
- Ensuring a state of good repair of key intercity passenger rail assets;
- Promoting standardized rolling stock, signaling, communications, and power equipment;
- Improved freight or commuter rail operations, in relation to proportional cost-sharing (including donated property) by those other benefiting rail users;
- Equitable financial participation in the project's financing, including, but not limited to, consideration of donated property interests or services; financial contributions by freight and commuter rail carriers commensurate with the benefit expected to their operations; and financial commitments from host railroads, non-Federal governmental entities, nongovernmental entities, and others;
- Encouragement of the implementation of positive train control (PTC) technologies (with the understanding that 49 U.S.C. 20147 requires all Class I railroads and entities that provide regularly scheduled intercity or commuter rail passenger services to fully institute interoperable PTC systems by December 31, 2015); and
- Incorporating private investment in the financing of capital projects or service operations.

The proposed Richmond Area to Washington D.C. project segment of the Southeast High Speed Rail (SEHSR) Maximum Achievable Speed of 90 miles per hour (MAS 90) Tier II EIS would provide the NEPA documentation for the balance of the SEHSR Corridor Tier II beyond that covered by the pending Richmond, VA to Raleigh, NC MAS 90/110 Tier II EIS. This project supports the development of intercity high-speed rail service and is the northern segment of the Southeast High Speed Rail Corridor connecting Washington, D.C. to locations in Virginia, North and South Carolina, Georgia and Florida. The MAS 90 PE design for Richmond Area to Arlington of this corridor segment would utilize the completed PE design for MAS 79, funded by CSX and DRPT, from South Acca Yard to Hamiltons just south of Fredericksburg, VA and Rivanna Junction to Beulah in Henrico County, VA. The PE between South Acca Yard and Rivanna Junction south of Main Street Station is being completed under a separate FRA grant effort with DRPT. The proposed improvements extend north through Richmond's historic Main Street Station from Centralia in Chesterfield County, VA (Mile Post (MP) A-11) and northwest from Beulah in Henrico, County, VA (MP CA-76) on the Peninsula Line to Control Point RO in Arlington VA (MP CFP-110) and upon completion will bring the SEHSR Corridor Raleigh NC to Washington D.C. to a Tier II project NEPA. The DRPT Tier II EIS Richmond Area to Washington D.C. includes MAS 90 design for this corridor. Project EIS

⁹ PE/NEPA activities include the specific tasks necessary to complete PE/NEPA documentation and other tasks applied for in this application that relate to this phase of the underlying project. The underlying project is the larger area and/or infrastructure that will be become the FD/Construction project following completion of the PE/NEPA activities.



overlap between Richmond Main Street Station and Centralia will use the Richmond, VA to Raleigh, NC Tier II EIS completed previously to govern project NEPA. The Richmond Area to Washington, D.C. project segment of the SEHSR will help to reduce traffic congestion by removing cars from the highways and connect downtown center cities with Richmond, VA's Main Street Station when this segment's construction is complete.

The Richmond Area to Washington D.C. project segment of the SEHSR Corridor was identified in the FRA's 1999 Report to Congress as a passenger rail improvement required in the corridor to support expanded intercity passenger rail service to enhance intercity travel options, while preserving freight railroad capacity and operations.

This project fulfills the purpose and need identified in the FRA 1999 Report to Congress by completing a Tier II EIS MAS 90 NEPA document for the Richmond Area to Washington D.C. project segment of the overall SEHSR corridor plan. The overall corridor was developed through the efforts of NCDOT bi-state MOU and the I-95 Corridor Task Force, of which FRA is a participant in both efforts. This project segment of the SEHSR will use trains that are extended routes from the Amtrak North East Corridor (NEC) passenger service promoting additional use of standardized rolling stock and power equipment. Use of existing NEC train extensions allows for higher speed operations without having to provide new equipment for project implementation.

This project, when construction is completed, restores north/south intercity passenger train service to Richmond's historic downtown Main Street Station and will enhance Richmond's downtown intercity connections with downtown Washington D.C. and downtown Raleigh. Resumption of north/south intercity passenger rail service to Richmond's historic downtown Main Street Station will encourage the use of existing GRTC bus lines that use Broad Street and the potential future Bus Rapid Transit system running on Broad Street in Richmond. SEHSR and Hampton Roads High Speed Rail Extension of SEHSR passenger service running to Union Station in downtown Washington D.C. encourage the use of the intermodal DC Metro rail system. The Hampton Roads High Speed Rail Extension of the SEHSR project segment, when completed, will provide high speed intercity passenger rail service to downtown Norfolk. CSX is cost sharing 5% for the PE/NEPA design of this project.

Eighteen existing Amtrak intercity trains will benefit from increased operational reliability and potential reduction in trip times. The future SEHSR and the Hampton Roads High Speed Rail Extension of SEHSR would increase the frequency to 32 trains over the project limits for an integrated high-speed and intercity passenger network that includes the existing Amtrak intercity service and enhanced intercity travel options. These increased train frequencies to the SEHSR spine and the Hampton Roads High Speed Rail Extension of SEHSR project corridor segment will be coupled with other projects outside of the Richmond Area to Washington, D.C. project limits as the entire corridor is developed.

The Richmond Area to Washington, D.C. project corridor segment of the SEHSR is a part of the Corridor and Service Development Plan which includes Positive Train Control (PTC) improvements to the signal system. This project corridor segment will include a PTC signal system when fully constructed. This project includes the realignment of some existing curves to reduce the degree of curvature for increased passenger rail service operating speeds. These realignments will contribute to the state of good repair by reducing maintenance issues for these curves. CSX is contributing to the PE/NEPA design of this Richmond to Washington D.C. project segment of the SEHSR corridor.

(1b) Other Public Benefits

Demonstrate the potential of the proposed PE/NEPA activities or underlying project to achieve other public benefits in a



cost-effective manner:

- Environmental quality and energy efficiency and reduction in dependence on foreign oil, including use of renewable energy sources, energy savings from traffic diversions from other modes, employment of green building and manufacturing methods, reductions in key emissions types, and the purchase and use of environmentally sensitive, fuel-efficient, and cost-effective passenger rail equipment;
- Promoting interconnected livable communities, including complementing local or state efforts to concentrate higherdensity, mixed-use, development in areas proximate to multi-modal transportation options (including intercity passenger rail stations);
- Improving historic transportation facilities; and
- Creating jobs and stimulating the economy. Although this solicitation is not funded by the American Recovery and Reinvestment Act of 2009 (Public Law 111-5), these goals remain a top priority of this Administration. Therefore, Individual Project applications will be evaluated on the extent to which the project is expected to quickly create and preserve jobs and stimulate rapid increases in economic activity, particularly jobs and activity that benefit economically distressed areas, as defined by section 301 of the Public Works and Economic Development Act of 1965, as amended (42 U.S.C. 3161) ("Economically Distressed Areas").

As detailed in the Corridor and Service Development Plan, the proposed project corridor segment improvements and improved passenger rail service would fulfill the following purposes and need:

- > Regional Linkage and Improve Travel Time-Improve regional linkage and travel time by improving the reliability and frequency of passenger rail connections from the region to the Southeast, Northeast, and Mid-Atlantic regions;
- > Limit the Growth of Traffic Congestion—Limit the growth of congestion on roads and airports by diverting car and airplane trips to trains by providing improved transportation choices for the traveling public, particularly special populations such as the elderly and the disabled;
- > Multimodal System Development–Improve rail system capacity and public transit connections resulting in a more balanced use of the overall transportation system while minimizing environmental impacts;
- > Safety–Reduce accidents by diverting auto traffic to rail and improving grade crossings;
- > Air Quality and Energy Efficiency-Improve air quality and energy efficiency by diverting automobile users to trains:
- > Economic Development–Enhance economic opportunities, tourism and regional competitiveness by improving the freight and passenger rail system and create jobs during construction and during the increased passenger train service when the corridors are fully constructed; and
- >By enhancing existing Amtrak train operations on an existing rail corridor, the program leverages previous investments to create a new high speed corridor in a cost effective manner without needing new equipment. The SEHSR and HRHSR both utilize the historic Richmond Main Street Station to return the station to full intercity train facility. Currently only regional trains to Newport News stop at this station.

(2) Project Delivery Approach

Consider the following factors to determine the risk associated with the PE/NEPA activities delivery within budget, on time, and as

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designed:

- The applicant's financial, legal, and technical capacity to implement the project, including whether the application depends upon receipt of any waiver(s) of Federal railroad safety regulations that have not been obtained;
- The applicant's experience in administering similar grants and projects, including a demonstrated ability to deliver on prior FRA financial assistance programs;
- The soundness and thoroughness of the cost methodologies, assumptions, and estimates for the proposed project;
- The reasonableness of the schedule for project implementation;
- The thoroughness and quality of project management documentation;
- The timing and amount of the project's future noncommitted investments;
- The overall completeness and quality of the application, including the comprehensiveness of its supporting documentation;
- The readiness of the project to be commenced; and
- The timeliness of project completion and the realization of the project's anticipated benefits.

The Commonwealth of Virginia has funded and developed over \$200M in large rail capital projects in the SEHSR Washington, D.C. to Norlina, NC and Hampton Roads High Speed Rail Corridor Extension of SEHSR with its partners at CSX, Amtrak, VRE, and FRA. Since only Commonwealth funds were involved in previous \$200 million corridor projects, as the administering agency, DRPT used existing management systems to control the projects. As a part of its investment and project portfolio, DRPT also administers three rail development programs with around \$600 million in private and public funded projects underway or programmed since 2006. The projects met the Commonwealth's financial requirements for expenditure of Commonwealth funds, were well managed and coordinated, and met schedule commitments.

In addition, the Commonwealth has an integral role in the development, funding, and execution of two large rail transit projects; the Dulles Corridor Metrorail Project (\$2.6B) and the Tide, Norfolk's light rail project (\$288M) are currently under construction through FTA Full Funding Grant Agreements. These two projects follow the FTA project management systems.

The OMB and FRA HSIPR guidance sets out a slightly different management and reporting structure for projects using ARRA funds than DRPT's current procedures for its rail and transit program projects. To address these differences, DRPT has developed a Program Management Plan (PMP) and QA/QC Plan for the FRA ARRA projects in Virginia. The PMP embraces the concepts of the FTA management processes used on state FTA funded projects, and meets the OMB and FRA requirements.

In order to meet DRPT's staffing needs for technical expertise, in 2007, DRPT established contracts with six consultant teams to provide embedded program and project management staff, in addition to on-call planning and engineering services. This combination of resources through DRPT staff and technical experts has delivered significant benefits to DRPT projects. For example, the rail team was able to value engineer a solution on the AF (Franconia) to RW (Ravensworth) project in this corridor that eliminated over \$500,000 in change order requests.

(3) Project Delivery Approach

Address the likelihood of realizing the proposed project's benefits:

- The quality of financial planning documentation that demonstrates the financial viability of the HSIPR service that will benefit from the project;
- The availability of any required operating financial support, preferably from dedicated funding sources for the benefiting intercity passenger rail service(s);



- The quality and adequacy of project identification and planning;
- The reasonableness of estimates for user and non-user benefits for the project;
- The comprehensiveness and sufficiency, at the time of application, of agreements with key partners (including the railroad operating the intercity passenger rail service and infrastructure-owning railroads) that will be involved in the operation of the benefiting intercity passenger rail service, including the commitment of any affected host-rail carrier to ensure the realization of the anticipated benefits, preferably through a commitment by the affected host-rail carrier(s) to an enforceable on-time performance of passenger trains of 80 percent or greater;
- The favorability of the comparison between the level of anticipated benefits and the amount of Federal funding requested;
- The applicant's contribution of a cost share greater than the required minimum of 20 percent.

As with any project at the PE/Tier II EIS level, there are details and some uncertainties to be resolved during the design process. Since 2002, DRPT and its partners have worked through this process on the other projects constructed in this corridor. The I-95 Task Force has been a valuable resource to identify risks, develop technical and procedural solutions to mitigate the risks, and to identify and apply best practices. DRPT and its partners will continue to work together with the I-95 Task Force to minimize risks for this project.

The Program Management Plan (PMP) contains several procedures designed to either ascertain or control risks. The Risk Analysis requirement formalizes the process of identifying knowable risks and developing strategies for mitigation. The Value Engineering requirements will reduce the financial risks of the project by identifying best practices. The Change Control Board detailed in the PMP is used to control the budget, quality, performance and schedule risks associated with changes in all phases of the project cycle.

Employing all of the above strategies will reduce the risk, however events may occur that are unavoidable and that may result in budget issues. The Commonwealth understands that the ARRA grants from the FRA will be capped at a certain percentage of cost and also at a certain level. The Commonwealth will be responsible for cost overruns. Fortunately, Virginia has a dedicated revenue source for railroad projects that can potentially be used to cover any increased costs of this project.



F. Statement of Work

Provide a detailed response for how the PE/NEPA activities will be carried out in the text fields and tables provided. The tables in this section are unlocked; applicants can add rows, as necessary, for additional tasks. If you reference a supporting document, it must be listed in Section G.2.

(1) **Background.** Briefly describe the events that led to the need for the proposed PE/NEPA activities and the underlying issue the project will address. Also describe the rational planning process used to analyze the investment needs and service objectives of the full corridor on which the individual underlying project and the PE/NEPA activities are located.

The proposed Richmond historic Main Street Station to Washington D.C. project segment of the Southeast High Speed Rail (SEHSR) MAS 90 Tier II EIS would provide the NEPA documentation for the balance of the SEHSR Corridor Tier II beyond that covered by the pending Richmond VA to Raleigh NC MAS 90 Tier II EIS. This project is the northern segment of the Southeast High Speed Rail Corridor connecting Washington, DC to locations in Virginia, North and South Carolina, Georgia and Florida. The PE design for Richmond Area to Arlington MAS 90 design of this corridor segment would utilize the completed PE design for MAS 79 from SAY to Hamiltons. The proposed improvements extend north through Richmond's historic Main Street Station from Centralia in Chesterfield county (A-11) and northwest from Beulah (MP CA-76) on the Peninsula Line to RO in Arlington VA (MP CFP-110) and upon completion will bring the SEHSR Corridor Raleigh NC to Washington D. C. to a Tier II project NEPA. The DRPT Tier II EIS Richmond Area to Washington D.C. includes MAS 90 design for this corridor. This segment of the SEHSR will help to reduce traffic congestion by removing cars from the highways when this segment's construction is complete.

The Richmond Area to Washington D.C. project segment of the SEHSR Corridor was identified in the FRA's 1999 Report to Congress as a passenger rail improvement required in the corridor to support expanded intercity passenger rail service to enhance intercity travel options, while preserving freight railroad capacity and operations.

This project fulfills the purpose and need identified in the FRA 1999 Report to Congress by completing a Tier II IES MAS 90 NEPA document for the Richmond Area to Washington D.C. project segment of the overall SEHSR corridor plan. The overall corridor was developed through the efforts of NCDOT state compact task force and the I-95 Corridor Task Force, of which FRA is a participant.

This project, when construction is completed, restores intercity passenger train service to Richmond's historic downtown Main Street Station and will enhance intercity connections with downtown Washington D.C. and downtown Raleigh. The HRHSR project when completed will re-establish intercity passenger rail service to downtown Norfolk.

- (2) Scope of Activities. Clearly describe the scope of the proposed PE/NEPA activities and identify the general objective and key deliverables.
 - (2a) General Objective. Provide a general description of the PE/NEPA work to be accomplished through this grant, including PE/NEPA activities, the underlying project study area, and other parties involved. Describe the end-state of the project, how it will address the need identified in Background (above), and the outcomes that will be achieved as a result of these PE/NEPA activities and underlying project.

DRPT will prepare a Tier II Environmental Impact Statement (EIS) for the identified Richmond Area to Washington, D.C. SEHSR Project Corridor Segment projects to provide intercity passenger and high speed rail (HSR) improvements. The project will also prepare PE design for components of the Richmond Area to Washington D.C. project segment Hamiltons (CFP 55.7) in Fredericksburg, VA and Control Point "RO" (mile post CFP 110) in Arlington County, VA and complete the PE design for components in the Richmond Area that have not been provided through other efforts. These intercity and HSR improvements (Build Alternative) will be considered together for each location, within one large study corridor for the alternative. The Tier II EIS will also evaluate the No Build Alternative as required under NEPA.

In an effort to allow the current study to be comparable and build upon the Draft Tier II EIS for Richmond, VA Main Street Station to Raleigh, NC, this Tier II EIS of the Richmond Area to Washington D.C. project and PE design will therefore be a



project level environmental document that presents a project level review of the Richmond Area Build Alternatives and that could result in a FONSI depending upon the impacts identified that supports a location decision between the build alternative and the no build alternative. As was done for the Richmond, VA to Raleigh, NC Tier II EIS, all known potential impacts (environmental resources) will be presented at the micro level in order to understand the impacts to the community.

The estimated total potential impacts discussed in the proposed Tier II EIS will therefore represent the known resources that exist within each buffer study area. The defined study areas will allow for avoidance and minimization during the Final design. Actual impacts could be reduced based upon the footprint of the final design for the Selected Alternative.

The proposed Tier II EIS under this application will show preliminary design plans that identify specific alignments and proposed improvements, additional ROW to be acquired, specific station site plans and operational details, the number of train stops, detailed environmental and engineering analyses (including grade crossing details), and more accurate capital cost estimates. During this EIS effort, detailed agency scoping and coordination will take place. Additional public involvement will be considered, as well. The EIS will provide a more precise and detailed environmental impact analysis, which will evaluate specific segments of the preferred study area alternative with additional research, coordination, and field surveys. Reduced buffer widths and avoidance/minimization activities will be identified and are expected to substantially lower potential impacts for the preferred alternative.

(2b) **Description of Work.** Provide a detailed description of the specific tasks to be accomplished through this grant in a logical sequence that would lead to the anticipated outcomes and the end state of the activities.

Conduct a Tier II EIS for the Richmond Area to Washington D.C. project segment of the Washington D.C. to Charlotte NC SEHSR corridor will conform to the applicable sections of FRA's Procedures for Considering Environmental Impacts (64 FR 28545, May 26, 1999) as well as CEQ, FHWA and other federal agency guidelines.

Task Management and Coordination

Progress reports will be prepared and submitted for review and approval. Technical direction and management will be provided by DRPT for consultant utilized for this project. DRPT will develop a project schedule using Microsoft Project. This schedule will be updated as part of invoicing and progress reporting on the project. Project files, hard and electronic, will be maintained and organized in the development of this task. At the completion of the environmental document, this Administrative Record will be collected and organized by and provided to FRA.

Purpose and Need

This task includes the identification of the transportation issues or needs that the project will address and the preparation of a purpose and need problem statement that meets FRA guidelines. For the most part, this section will be derived from the Washington, D.C. to Charlotte, NC Tier I EIS Record of Decision, except for the addition of the Amtrak services as part of this project, which were not specifically included in the EIS.

The Purpose and Need statement will summarize the study area, history (including legislative mandates), and needs (existing and future) of the project using information found in various studies prepared on the project to date, including Proposed Six-Year Rail Improvement Plan and State Rail Plan. Other documents to be referenced include Potential Improvements to the Washington to Richmond Railroad Corridor, NRPC May 1999; Washington, DC to Richmond Third Track Feasibility Study, DRPT House Document No. 78; High Speed Rail Tier I FEIS, along with other transportation plans and documents.

Alternatives Evaluation

The Alternatives Section will describe and evaluate in general the Build Alternative as well as the No-Build Alternative. Proposed Amtrak improvements for the Build Alternative will be generally discussed using available descriptive information, including operational changes and structural changes to existing and new stations. Preliminary cost estimates for the build alternative will be included in the proposed Richmond Area to Washington, D.C. Tier II EIS.



Draft Tier II Environmental Impact Statement

DRPT will produce the Draft Tier II EIS in coordination with the FRA. Sections to include in the Tier II EIS include coversheet, purpose and need, alternatives, environmental consequences, secondary and cumulative impacts, comments and coordination and appendices. The following information will be gathered to quantify potential impacts:

Water Resources

- Water Supply Watersheds
- Wetlands
- Stream Crossings
- Floodplains
- Water Quality
- Wild and Scenic Rivers
- Permits

Wildlife and Protected Species

- Wildlife
- Protected Species

Geology & Soils

- Topography/Geology/Soils
- Prime Farmland
- Minerals

Hazardous Materials Sites

Noise and Vibration

Transportation

- Rail and Vehicular Flow
- Impacts to Intercity Passenger Rail Service
- Impacts to Freight Rail Service
- Impacts to Commuter Rail Service
- Impacts to Mobility and Accessibility
- At-Grade Crossing Impacts
- At-Grade Crossing Impacts by Study Area Alternative
- Impacts at Stations and Terminal Areas

Air Quality

- Regional Assessment
- Local Assessment
- Air Quality Assessment Documentation

Energy

Social and Economic Impacts

Community Facilities, Services and Utilities

- Community Cohesion
- Economics
- Land Use

Relocations / Property Acquisition

Environmental Justice

Aesthetics and Visual Impacts



Public Health, Safety and Security
Historic Resources
Section 4(f) and Section 6(f)
Construction Impacts
Indirect Impacts / Cumulative Impacts

Public Involvement

DRPT will provide public information on the Tier II EIS including a special web page, a fact sheet, maps, and a general project presentation on the DRPT website. Opportunities for public involvement in the Tier II EIS process will also be made, specifically a public hearings to present the DRAFT Tier II EIS. Stakeholder groups will also receive briefings during the development of the EIS. Comments will be received from the public throughout the development of the Tier II EIS via the DRPT website.

Revised Environmental Impact Statement

A Revised Environmental Impact Statement through coordination FRA and any other federal, state and local agencies having review functions for the Final Tier II EIS. Issuance of a Record of Decision (ROD), will conclude the project.

Generally, the Preliminary Engineering Design will be the development of reports, studies, and 30% plans in general conformance to the conceptual design documents submitted to FRA as approved by all parties. Some projects within the project limits have already been designed to the 30% level and those documents will be included in the Tier II EIS.

The project will be designed to be built and maintained to accommodate FRA Class 5 track safety standards at a minimum. The design speed will be 90 mph.

The component projects included in the PE scope were identified in the Virginia I-95 High Speed Rail Corridor & Service Development Plan - SEHSR Corridor I-95 Richmond Area to Washington D.C. Project Segment.

The following PE sections of the Richmond Area to Arlington County, VA. (RO) projects are included in this application;

- 1. Construction of Alexandria Station Platform / Metro Connection CFP 105 (Alexandria)
- 2. Construction of Fourth Main Line Track AF to RO CFP 104 to CFP 110 (Alexandria)
- 3. Ruffin Passing Siding Construction
- 4. Main Street Station Identified Platforms and Bridges resulting from the \$2.0M FRA Grant effort underway
- 5. Richmond Area Improvements CFP 1 to CFP 7, S 0 S 11, RA 89 including construction of Grade Separations Adjustment to Parham Road and new Hermitage Road and Hungary Road and construction of a New Parham Road Station (Richmond)
- 6. Construction of Platform Improvements to Crystal City, Lorton, Rippon, Brooke, Leeland, and Franconia
- 7. Construction/Upgrade of Fourth Main Line Track Fredericksburg to Mine Road in Spotsylvania Couty CFP 54 to CFP 59.
- 8. Construction of Third Main Line Track Franconia to Lorton CFP 93 to CFP 99 including an East Side Platform at Franconia Station.
- 9. Construction of Third Main Line Track Powell's Creek to Lorton CFP 83 to CFP 93 including bridges at Powell's Creek, Neabsco Creek, and the Occaquan River
- 10. Construction of Third Track Arkendale to Dalghren CFP 61 to CFP 72 including the Aquia Creek bridge
- 11. Construction of Track and Curve Geometry Realignment to Accomodate 90MAS where possible Richmond to RO.
- 12. Construction of High Speed Interlockings Richmond to RO. (various)
- 13. Signal Improvements for 90 Miles per Hour Segments of Train Operations Richmond to RO (various)



The following list describes in general terms the scope of the overall project;

- •Track Structures and Track The project includes the construction of new third and fourth track and structures adjacent to the existing two-track CSX mainline.
- •Structures, including pipes and drainage ways, will be located and constructed to allow future adjustments to the alignment to reach 90 MPH where possible. These items will be considered in project final design. Stations,
- •Terminals and Intermodal New Platforms and platform extensions to serve existing and future service.
- •Support Facility (Yards, Shops, Administrative Building) No Support facilities are included in this project. Relocated yard office and bulk intermodal facility are included.
- •Site work, Right-of-Way, Civil and Property Activity New embankments, retaining walls, and cut sections will be required to prepare the roadbed for an additional track. Construction easements may be required for the construction. Drainage and utility relocations and modifications will be required for the new embankment and bridge work.
- •Communications and Signaling New and upgraded communications and signal systems are included in this project. The signal system will have provisioned space for future PTC equipment installation.
- •Electric Traction No Electric Traction work is included in this project.
- •Rolling Stock and Equipment No Rolling Stock or Equipment will be procured under this project.
- •Professional Services Professional Services for the preparation of the design documents and reports are included in this project.
- (2c) Deliverables. Provide FRA with a list of the deliverables in the table below. List the deliverables, both interim and final, that are the outcomes of the project tasks. This should include a first deliverable 1 Detailed PE/NEPA Workplan and Schedule. Add rows to the table as necessary.

	Deliverable	Task
1	Detailed PE/NEPA Work plan and Schedule (Required)	
2	Task Management and Coordination	
3	Purpose and Need	
4	Draft Environmental Impact Statement	
5	Public Involvement	
6	Revised Environmental Impact Statement	
7	Preliminary Engineering Reports and Drawings	

(3) **Project Schedule.** In the table below, list all tasks and estimate the approximate duration for completing each task identified above in Deliverables. For example, "6 months after start date the first task or interim deliverable will be complete." Add rows to the table as necessary.

		Task	Task Duration
Ī	1	I-95 Corridor MAS 90 Tier II EIS	96 Months
Ī	2	I-95 Corridor MAS 90 PE	48 Months

(4) **Project Cost Estimate/Budget.** Provide an overall cost summary, by phase, of PE/NEPA activity in this section, using Appendix 3 of the NOFA. Ensure that the information below corresponds to the list of tasks provided above. The figures in this section of the Statement of Work should match exactly with the funding amounts requested in the SF-424 and in Section C of this application. If there is any discrepancy between the Federal funding amount requested in this section, the SF-424 form, or Section C of this application, the lesser amount will be considered as the Federal funding request. Round to the nearest whole dollar when estimating costs.

The total estimated PE/NEPA activities cost is provided below, for which the FRA grant will contribute no more than the Federal funding request amount indicated. Any additional expense required beyond that provided in this grant to complete the PE/NEPA activities shall be borne by the Grantee.

	PE/NEPA Activities Overall Cost Summary							
#	Task		Cost in FY 2011 Dollars					
1	I-95 Corridor MAS 90 Tier II EIS	\$ 28,080,000						
2	I-95 Corridor MAS 90 PE	\$ 27,305,000						
	Total	\$ 55,385,000						
	Federal/	Non-Federal Funding						
		Cost in FY 2011 Dollars	Percentage of Total Activities Cost					
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	Federal funding request	\$ 44,308,000	80 %					
	Non-Federal match amount	\$ 44,308,000	20 %					

G. Optional Supporting Information

Provide a response to the following questions, as necessary, for the proposed PE/NEPA activities.

- (1) Please provide any additional information, comments, or clarifications and indicate the section and question number that you are addressing (e.g., Section E, Question 3). Completing this question is optional.
- (2) Please provide a document title, filename, and description for all optional supporting documents. Ensure that these documents are uploaded to GrantSolutions.gov or that an active link is provided with your application and use a logical naming convention.

Document Title	Filename	Description and Purpose
July 28,2010 Cover Letter to Mr. Joseph Szabo	VA - SEHSR - RIC- WAS Segment - Tier II EIS-PE Cover Letter.pdf	Cover Letter
FRA Disclosure of Lobbying Activities	VA - SEHSR - RIC- WAS Segment - Disclosure of Lobbying Activities.pdf	Disclosure of Lobbying Activities
Standard Form SF 424, 424A, and 424B	VA - SEHSR - RIC- WAS Segment - SF 424, 424A, & 424B.pdf	Standard Form SF 424, 424A, and 424B
FRA Certifications	VA - SEHSR - RIC- WAS Segment - FRA Certifications.pdf	FRA Certifications
Service & Project NEPA Documentation	Service & Project NEPA Documentation Folder	Service & Project NEPA Documentation
Service Development Plan	Service Development Plan Folder	Service Development Plan
Richmond Area Improvements Overall Map	VA - Richmond Area Improvements Overall Map.pdf	Richmond Area Improvements Overall Map
SEHSR - I-95 Segment - Cost Benefit Analysis & Economic Impact September 28, 2009	VA - SEHSR - I-95 Segment - CBA EIA Appendix.pdf	SEHSR - I-95 Segment - Cost Benefit Analysis
VA - SEHSR - Corridor Segment Map.	VA - SEHSR - RIC- WAS Segment - Corridor Map.pdf	Richmond-Washington D.C. Corridor Map
SEHSR - RIC-WAS Segment - Future Construction Projects Map	VA - SEHSR - RIC- WAS Segment - Future Construction Projects Map.pdf	SEHSR - RIC-WAS Segment - Future Construction Projects Map
Financial Planning Documentation	Financial Planning Documentation Folder	Financial Planning Documentation
Project Management Documentation	Project Management Documentation Folder	Project Management Documentation

Form FRA F 6180.138 (07-09)



Railroad and Project Sponsor Agreements	Railroad and Project Sponsor Agreements Folder	Railroad and Project Sponsor Agreements
System Safety Plan	System Safety Plan Folder	System Safety Plan
2008 AmtrakReport Advancing Passenger Rail in the Commonwealth of Virginia	VA - SEHSR - RIC- WAS Segment - 2008 Amtrak Report.pdf	2008 AmtrakReport
Summary of Financila Analysis on Impact of Virginia SEHSR 2018 Proposed Service - September 2009	VA - SEHSR - RIC- WAS Segment - Amtrak 2018 Financial Analysis Summary.pdf	Amtrak 2018 Financial Analysis Summary
SEHSR - RIC-WAS Segment - Amtrak Support Letter	VA - SEHSR - RIC- WAS Segment - Amtrak Support Letter.pdf	SEHSR - RIC-WAS Segment - Amtrak Support Letter
SEHSR - RIC-WAS Segment - Collaborative Resolutions in Support of High Speed Rail	VA - SEHSR - RIC- WAS Segment - Collaborative Resolutions in Support of High Speed Rail.pdf	SEHSR - RIC-WAS Segment - Collaborative Resolutions in Support of High Speed Rail
Report to Congress May 1999 Volumes I & II Potential Improvements to the Washington- Richmond Railroad Corridor National Railroad Passenger Corporation	VA - SEHSR - RIC- WAS Segment - Congress Report vol 1 & 2.pdf	SEHSR - RIC-WAS Segment - Congress Report vol 1 & 2
CSX Capacity Study of Richmond VA Washington D.C. Rail Corridor - 2000	VA - SEHSR - RIC- WAS Segment - Corridor Capacity Study.pdf	VA - SEHSR - RIC-WAS Segment - Corridor Capacity Study
Commonwealth Transportation Board - Resolution for Passenger Rail	VA - SEHSR - RIC- WAS Segment - CTB Resolution for Passenger Rail.pdf	Commonwealth Transportation Board - Resolution for Passenger Rail
SEHSR - RIC-WAS Segment - DC- Richmond Passenger Rail Study	VA - SEHSR - RIC- WAS Segment - DC- Richmond Passenger Rail Study.pdf	SEHSR - RIC-WAS Segment - DC-Richmond Passenger Rail Study
Piedmont High Speed Corridor Line Capacity Analysis - 1997	VA - SEHSR - RIC- WAS Segment - Piedmont High Speed Corridor Line Capacity Analysis.pdf	Piedmont High Speed Corridor Line Capacity Analysis
Richmond Area Phase I & Phase II - Richmond Rail Master Plan - 2003	VA - SEHSR - RIC- WAS Segment - Richmond Area Phase I & Phase II - Richmond Rail Master Plan.pdf	SEHSR - RIC-WAS Segment - Richmond Area Phase I & Phase II - Richmond Rail Master Plan
Statewide Rail Plan Commonwealth of Virginia - December 12 2008	VA - SEHSR - RIC- WAS Segment - Virginia	Virginia Statewide Rail Plan



	Statewide Rail Plan.pdf	
Virginia 2008 Statewide Rail Resource Allocation Plan	VA - SEHSR - RIC- WAS Segment - Virginia Statewide Rail Resource Allocation Plan.pdf	Virginia Statewide Rail Resource Allocation Plan

H. Checklist of Application Materials

Use this section to determine the thoroughness of your PE/NEPA application prior to submission.

Documents	Format			
1. Application Form				
	Form			
2. OMB Standard Forms				
SF 424: Application for Federal Assistance	Form			
SF 424A: Budget Information-Non Construction	Form			
	Form			
3. FRA Assurances Document				
☐ FRA Assurances Document (See Section 4.2.4 of the NOFA)	Form			
4. Project Development Supporting Documentation				
Project Planning Documentation (See Section 4.2.5 of the NOFA)	No Specified Format			
5. Project Delivery Supporting Documentation				
Project Management Documentation (See Section 4.2.6 of the NOFA)	No Specified Format			
Financial Planning Documentation (See Section 4.2.6 of the NOFA)	No Specified Format			
Railroad and Project Sponsor Agreements (See Section 4.2.6 of the NOFA)	No Specified Format			
6. Optional Supporting Documentation				
Other Relevant and Available Documentation (See Section 4.2.7 of the NOFA)	n/a			
⊠ Eligibility Documentation (See Section 3.2 of the NOFA)	n/a			

PRA Public Protection Statement: Public reporting burden for this information collection is estimated to average 32 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a Federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for this information collection is 2130-0583.